ON TRACK WITH MDT

As anyone who works with highway construction can tell you, designing and building roads is not a stagnant process.

In truth, the practice of constructing highways is continually evolving as we respond to the needs of our customers and their communities.

Nowhere is that more apparent than in our and other DOTs' use of context sensitive solutions, or CSS.

According to the Federal Highway Administration's (FHWA's) November 2003 edition of *Focus: Accelerating Infrastructure Innovations,* http://www.tfhrc.gov/focus/nov03/02.htm, CSS "is a collaborative, interdisciplinary approach to involve all stakeholders in the development of a transportation project. This involvement ensures that the project fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility."

Their description of CSS continues:

> Often previously referred to as context sensitive design (CSD), the term "CSS" reflects the broad applications of the context sensitive approach. The CSS approach considers the total context within which a transportation improvement project will exist. It also focuses on providing an early and clear statement of purpose and need for a project and then addressing equally such considerations as safety, mobility, aesthetic characteristics, historical and cultural resources, and environmental and other community values.

The concept is further detailed in the July 1997 publication *Flexibility in Highway Design*, a collaborative effort by the FHWA, the American Association of State Highway and Transportation Officials (AASHTO) and several related interest groups. Its purpose is to identify and explain ways to use flexible design standards to lessen the impacts of transportation projects on the environment.

That sounds good in theory, you may be thinking, but what about in application?

I'm pleased to tell you that MDT has been applying the principles of CSS around the state for several years – so much so that items such as erosion control are now considered standard practice and are not budgeted as CSS expenditures.

Perhaps some examples will help.

On the North Main and Lyndale project in Helena, we worked with the community to incorporate a pedestrian undercrossing, a bike path, a chain link fence for the bike path and raised medians with special landscaping (trees) in to the project design. The total

cost for these efforts, including graffiti control spray on the pedestrian undercrossing, came to approximately $575,274 or just over 4.5% of the $12.4 million project.

On the Florence-Lolo project in the Missoula district, we incorporated historic turnouts; decorative lighting; special landscaping; and a bike path that necessitated lengthening a bridge, putting in a culvert undercrossing, adding pipe extensions and widening the sidewalk. The cost for these CSS components was approximately $950,079, or just under 8.4% of the total construction cost of $11.3 million.

Wait a minute, you say, on one project the CSS expenditures were $575,000, or 4.5% of the total costs, and on another they were $950,000, or 8.4% of the total. How come the costs fluctuate so much?

The answer is quite simple: the costs fluctuate because the context-sensitive design/construction issues are specific to each stretch of road. Some projects, such as the Beaver Creek Bridge in the Great Falls district, have no CSS components, whereas others, like North of Stevensville Wye south of Missoula, have significant CSS expenditures.

The important thing to note is that we're designing and building these roads to meet the public's safety and mobility needs as well as the aesthetic, historic, cultural and environmental concerns of the communities being impacted by a given project. You can help by attending public meetings and providing your input, which we, in turn, can utilize to improve our roads.

By working together, we can bring CSS to a whole new level and help preserve both the past and the future of our great state. Frankly, I can't think of a better way to stay "on track" with MDT.

Dave Galt
Director